

REDUCING MEMORY USAGE
IN NONCOHERENT SIGNAL PROCESSING

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oABSTRACT OF THE DISCLOSURE

A method for detecting a positioning signal includes (a) correlating a segment of a received positioning signal with a reference signal of a selected code phase and frequency to obtain a correlation value, (b) if the correlation value is less than a predetermined minimum, assigning the correlation value to the predetermined minimum, and (c) accumulating the correlation value in a sum of correlation values obtained using other segments of the received positioning signal. In addition, the correlation value may be reduced by a predetermined value, which is preferably an expected mean value for a noise component in the segment of the received positioning signal.